

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L13	4252347	((current) or (electric adj charge) or (voltage) or (volts))	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 16:25
L14	2511599	(continous or continuously or continual or continuing or constant or perpetual)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 16:26
L16	167134	14 adj 13	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 16:28
L21	6826581	remove or removing or prevent or preventing or clean or cleaning	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:10
L22	3536065	(pipe) or (piping) or (heat adj exchanger) or (tube) or (tubing) or (condenser) or (cooler) or (superheater) or (evaporator)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:10
L23	1792	(165/95).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/12 17:10
L24	316053	((electric or electrical) adj charge) or (electricity) or (electro-static\$) or (electro adj static\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:10
L25	3201	L24 same L21 same L22	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:10

## EAST Search History

L26	11	L25 and L23	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:10
L27	1	Salbilla-Dennis-L.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:11
L28	11411	((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379) or (208/48R) or (208/369) or (204/525) or (134/1) or (134/22.11-22.12) or (134/18)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2006/07/12 17:12
L29	311593	((electric or electrical) adj charge) or (electricity)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:12
L30	5368886	fouling or foul or deposit or layer or film	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:12
L31	469	L30 same L21 same L22 same L29	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:12
L32	10	L31 and L28	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:12
S1	4113	((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/21 11:43
S2	536	(electric or electrical) adj charge and heat adj exchanger and fluid	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:45

## EAST Search History

S3	11	(electric or electrical) adj charge with heat adj exchanger and fluid	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/29 17:51
S4	1351367	control with magnitude with (electric or electrical) adj charge or fluid	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/29 17:52
S5	9	((electric or electrical) adj charge and heat adj exchanger and fluid) and (((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379)). CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/19 12:23
S6	2	((electric or electrical) adj charge with heat adj exchanger and fluid) and (((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379)). CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/29 17:52
S7	1188	(control with magnitude with (electric or electrical) adj charge or fluid) and (((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379)). CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/05/29 17:52
S8	245235	(petroleum) or (petrochemical)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:48
S9	581	(electric or electrical) adj charge and heat adj exchanger and fluid	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/10/18 15:43
S10	113	((electric or electrical) adj charge and heat adj exchanger and fluid ) and ((petroleum) or (petrochemical))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/10/18 15:39
S11	1627	((165/5) or (165/95)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2004/10/18 15:40

## EAST Search History

S12	47	(((165/5) or (165/95)).CCLS.) and ((petroleum) or (petrochemical))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/19 12:23
S13	95964	(electric or electrical) adj charge	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/10/18 15:43
S14	37139	("134"/\$).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/02 11:34
S15	585	(electric or electrical) adj charge and heat adj exchanger and fluid	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2004/11/02 11:34
S16	11	((electric or electrical) adj charge and heat adj exchanger and fluid ) and ("134"/\$).ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/19 12:23
S17	10	((electric or electrical) adj charge and heat adj exchanger and fluid) and (((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379)).CCLS.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/19 12:23
S18	12	((electric or electrical) adj charge and heat adj exchanger and fluid ) and ("134"/\$).ccls.)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/19 12:23
S19	47	(((165/5) or (165/95)).CCLS.) and ((petroleum) or (petrochemical))	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/04/19 12:23
S20	24	__("1809185") or ("2452367") or ("3354292") or ("3377463") or ("3983360") or ("4152577") or ("4175614") or ("4243381")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/21 11:05

## EAST Search History

S21	4241050	electric	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:05
S22	4338720	electric or electricity	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:06
S23	9	S22 and S20	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:06
S24	11213	((422/1) or (422/22) or (165/5) or (165/95) or (110/216) or (122/379) or (208/48R) or (208/369) or (204/525) or (134/1) or (134/22.11-22.12) or (134/18)).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/21 11:44
S25	293827	((electric or electrical) adj charge) or (electricity)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:58
S26	1	Salbilla-Dennis-L.in.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:11
S27	339293	(petroleum) or (petrochemical) or (refining or refinery or refineries)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:49
S28	5149048	fouling or foul or deposit or layer or film	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:50
S29	6542395	remove or removing or prevent or preventing or clean or cleaning	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:51

## EAST Search History

S30	3419616	(pipe) or (piping) or (heat adj exchanger) or (tube) or (tubing) or (condenser) or (cooler) or (superheater) or (evaporator)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:53
S31	447	S28 same S29 same S30 same S25	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:54
S32	2	S31 same S27	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:54
S33	10	S31 and S24	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:12
S34	1781	(165/95).CCLS.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2005/12/21 11:58
S35	297974	((electric or electrical) adj charge) or (electricity) or (electro-static\$) or (electro adj static)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:59
S36	298011	((electric or electrical) adj charge) or (electricity) or (electro-static\$) or (electro adj static\$)	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 11:59
S37	3024	S36 same S29 same S30	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2005/12/21 12:00
S38	11	S37 and S34	US-PGPUB; USPAT; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2006/07/12 17:10